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10/809,247	03/25/2004	Alan Tchochiev	MSFT122122	7234	
26389 · CHRISTENSE	7590 10/30/200' N. O'CONNOR. JOHN	7 ISON, KINDNESS, PLLC	EXAM	INER	
1420 FIFTH A	-			WANG, BEN C	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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• ¬	Application No.	Applicant(s)	-
	10/809,247	TCHOCHIEV, ALAN	
Office Action Summary	Examiner	Art Unit	
	Ben C. Wang	2192	
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet	with the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may od will apply and will expire SIX (6) Mit tute, cause the application to become	IICATION. a reply be timely filed DNTHS from the mailing date of this communication ABANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 16 2a) This action is FINAL. 2b) To This action is FINAL. 2b) To This action is application is in condition for allow closed in accordance with the practice under	his action is non-final. vance except for formal ma		;
Disposition of Claims			
4) ☐ Claim(s) 1-56 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-56 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the corr 11) The oath or declaration is objected to by the	ccepted or b) objected the drawing(s) be held in abeytection is required if the drawing	ance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.121(d	i).
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for forei a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume * See the attached detailed Office action for a limit 	ents have been received. ents have been received in riority documents have bee eau (PCT Rule 17.2(a)).	Application No en received in this National Stage	
Attachment(s) 1)		v Summary (PTO-413)	
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		o(s)/Mail Date f Informal Patent Application 	

DETAILED ACTION

1. Applicant's amendment dated August 16, 2007, responding to the Office action mailed May 17, 2007 provided in the rejection of claims 1-56, wherein claims 1, 7, 12-15, 17, 21-23, 30, 33-40, 45-46, 53, and 55 are amended.

Claims 1-56 remain pending in the application and which have been fully considered by the examiner.

Applicant's arguments with respect to claims rejection have been fully considered but are most in view of the new grounds of rejection – see *Westra* - art made of record, as applied hereto.

Claim Objections

- 2. Claim 14 is objected to because the following informalities:
 - "customizing properties of the generator;", claim 14, line 4, should be corrected "customizing properties of the generator."

Appropriate correction is required.

Claim Rejections – 35 USC § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious

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at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 3. Claims 1-6 and 30-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michel K. Bowman-Amuah (Pat. No. US 6,442,748 B1) (hereinafter 'Bowman-Amuah') in view of Jason Westra, (*UniqueID Generator: A Pattern for Primary Key Generation, December 1, 2000, SYS-CON Media*) (hereinafter 'Westra' art made of record)
- 4. **As to claim 1** (Currently Amended), Bowman-Amuah discloses a computer-readable medium having a base generator class stored thereon for use by developers to create generators to perform specific tasks, the base generator class comprising:
 - a base generator class constructor (i.e. Col. 285, Lines 21-42, class listing);
 - a status indicator (i.e. Col. 92, Lines 53-55; Col. 108, Lines 16-19; Col. 111, Line
 37; Col. 112, Lines 2, 9-10, 41-43);
 - a schedule class (i.e. Col. 74, Lines 21-23; Col. 100, Lines 20-24 they provide services for scheduling, starting, stopping, and restarting both client and server tasks; Col. 108, Lines 30-34 areas for design attention include scheduling...;
 Col. 109, Lines 40-44; Col. 118, Lines 47-49; Col. 188, Lines 43-46; Col. 194, Lines 1-2, 14-17);
 - a logging class; and wherein the logging class is used to verify the tasks
 performed by the generators (i.e. Fig. 12, environment --> application services --> logging; Col. 68., Lines 17-22; Col. 81, Lines 65-67; Col. 97, Lines 4-5; Col.

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100, Lines 38-43; Col. 101, Lines 10-14 – logging services support the logging of informational, error, and warning messages; Col. 194, Lines 14-17, 56-60).

Bowman-Amuah does not explicitly disclose a generator properties class that provides incrementation capability, which allows the value of a generator property to vary during consecutive executions of a generator.

However, in an analogous art of *UniqueID Generator: A Pattern for Primary Key* Generation, Westra discloses a generator properties class that provides incrementation capability, which allows the value of a generator property to vary during consecutive executions of a generator (e.g., P. 2, Sec. of 'System.CurrentTimeMillis()', 1st Par. - An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. – This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an n-tiered solution; bullet 5 – to change the incrementBy value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniqueID generator overcomes many scalability and

<u>flexibility issues</u> where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Westra into the Bowman-Amuah's system to further provide a generator properties class that provides incrementation capability, which allows the value of a generator property to vary during consecutive executions of a generator in Bowman-Amuah's system.

The motivation is that it would further enhance the Bowman-Amuah's system by taking, advancing and/or incorporating Westra's system which offers significant advantages that the data records or objects for each transaction require unique identifiers to allow them to be stored and retrieved accurately; thus there's a need to generate unique identifiers for the data involved in an EJB transaction process system as once suggested by Westra (e.g., P. 2, Lines 3-6).

5. **As to claim 2** (incorporating the rejection in claim 1) (Previously Amended), Westra discloses the computer-readable medium wherein the generator properties class that provides incrementation capability includes a plurality of generator properties (e.g., P. 2, Sec. of 'System.CurrentTimeMillis()', 1st Par. – An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. – This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The

<u>UniqueID generator pattern guarantees unique identifiers for your object/data</u> across an n-tiered solution; bullet 5 – <u>to change the *incrementBy* value</u>, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and <u>the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, <u>the UniqueID generator overcomes many scalability and flexibility issues</u> where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).</u>

- 6. **As to claim 3** (incorporating the rejection in claim 2) (Original), Bowman-Amuah discloses the computer-readable medium wherein said plurality of generator properties includes:
 - a value of a generator property (e.g., Fig. 60, elements 6002 setAttribute, 6000
 setAttribute);
 - a default validator that validates the value of the generator property (e.g., Fig. 129; Col. 250, Lines 9-22 the framework would provide a common approach to validating user data across all of an application's user interfaces; while some common validation rules would be provided ...; Fig. 127, elements 12702 validate(), 12706 validate(); Fig. 131 Validation Rule; Fig. 132; Col. 170, Lines 60-64).

Westra discloses a plurality of incrementation settings; a default incrementor that changes the value of the generator property (e.g., P. 2, Sec. of

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'System.CurrentTimeMillis()', 1st Par. – An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. – This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an n-tiered solution; bullet 5 – to change the *incrementBy* value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniqueID generator overcomes many scalability and flexibility issues where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

7. **As to claim 4** (incorporating the rejection in claim 1) (Original), Bowman-Amuah discloses the computer-readable medium wherein the status indicator includes a status user interface (UI) for displaying the execution status of generators (i.e. Fig. 129 – status; Col. 92, Lines 53-55; Col. 108, Lines 16-19; Col. 111, Line 37; Col. 112, Lines 2, 9-10, 41-43).

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8. **As to claim 5** (incorporating the rejection in claim 1) (Previously Presented), Bowman-Amuah discloses the computer-readable medium wherein the schedule class comprises:

- a start condition under which the execution of a generator may be started;
- a recurrence condition under which the execution of a generator may recur;
- an end condition under which the execution of a generator stops (i.e. Col. 51, Lines 8-16; Col. 74, Lines 21-23; Col. 100, Lines 20-24 they provide services for scheduling, starting, stopping, and restarting both client and server tasks; Col. 108, Lines 30-34; Col. 109, Lines 36-37; Col. 113, Lines 26-29 a set schedule and frequency); and
- a dialog box that can be used to accept user input (i.e. Fig. 164 SAVE,
 CANCEL; Fig. 165; Fig. 39; Col. 130, Lines 23-25; Col. 14, Lines 18-26; Col. 34,
 Lines 62-66; Fig. 129).
- 9. **As to claim 6** (incorporating the rejection in claim 1) (Previously Presented), Bowman-Amuah discloses the computer-readable medium wherein the logging class enables the recording of the execution process of a generator (i.e. Fig. 12, environment --> application services --> logging; Col. 68., Lines 17-22; Col. 81, Lines 65-67; Col. 97, Lines 4-5; Col. 100, Lines 38-43; Col. 101, Lines 10-14 logging services support the logging of informational, error, and warning messages; Col. 194, Lines 14-17, 56-60).

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10. **As to claim 30** (Currently Amended), Bowman-Amuah discloses a method for object generation using a base generator class, comprising:

- creating a generator that performs a specific task (i.e. Col. 14, Lines 24-26 they build from there by replacing some of the generic capabilities of the framework with the specific capabilities of the intended application);
- customizing settings of the generator, that specify how the value of a generator property may vary between generated objects (i.e. Col. 272, Line 66 through Col. 273, Line 6 persistence is the capability to permanently store this data in its original or a modified state, until the information system purposely deletes);
- executing the generator with the customized settings; and verifying the task based on the settings of the generator (i.e. Col. 186, Lines 8-20).

Bowman-Amuah does not explicitly disclose the settings include including incrementation settings.

However, in an analogous art of *UniqueID Generator: A Pattern for Primary Key Generation*, Westra discloses the settings include including incrementation settings (e.g., P. 2, Sec. of 'System.CurrentTimeMillis()', 1st Par. – An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. – This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an

n-tiered solution; bullet 5 – to change the *incrementBy* value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniqueID generator overcomes many scalability and flexibility issues where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Westra into the Bowman-Amuah's system to further provide the settings include including incrementation settings in Bowman-Amuah's system.

The motivation is that it would further enhance the Bowman-Amuah's system by taking, advancing and/or incorporating Westra's system which offers significant advantages that the data records or objects for each transaction require unique identifiers to allow them to be stored and retrieved accurately; thus there's a need to generate unique identifiers for the data involved in an EJB transaction process system as once suggested by Westra (e.g., P. 2, Lines 3-6).

11. **As to claim 31** (incorporating the rejection in claim 30) (Original), Bowman-Amuah discloses the method wherein creating a generator that performs a specific task comprises:

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creating a new generator class that inherits the base generator class (i.e. Col. 11, Lines 36-58; Col. 12, Lines 3-8, 47-49; Col. 13, Lines 5-9 – sub-classing and inheritance make it possible to extend and modify objects through deriving new kinds of objects from the standard classes available in the system; Col. 14, Lines 45-52);

- creating a public default constructor for the new generator class that overrides
 the base generator class constructor (i.e. Col. 11, Lines 55-58; Col. 14, Line
 63 through Col. 15, Line 3 to take full advantage a framework's reusable
 design, a programmer typically writes code that overrides and is called by the
 framework); and
- implementing a function in the new generator class to perform a specific task
 (i.e. Col. 14, Lines 24-26 they build from there by replacing some of the generic capabilities of the framework with the specific capabilities of the intended application).
- 12. **As to claim 32** (incorporating the rejection in claim 31) (Original), please refer to claim 8 as set forth accordingly.
- 13. **As to claim 33** (incorporating the rejection in claim 32) (Currently Amended), please refer to claim **9** as set forth accordingly.

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14. **As to claim 34** (incorporating the rejection in claim 31) (Currently Amended), please refer to claim 10 as set forth accordingly.

- 15. **As to claim 35** (incorporating the rejection in claim 31) (Currently Amended), please refer to claim 11 as set forth accordingly.
- 16. **As to claim 36** (incorporating the rejection in claim 30) (Original), please refer to claim 13 as set forth accordingly.
- 17. **As to claim 37** (incorporating the rejection in claim 36) (Currently Amended), please refer to claim **14** as set forth accordingly.
- 18. **As to claim 38** (incorporating the rejection in claim 37) (Currently Amended), please refer to claim **15** as set forth accordingly.
- 19. **As to claim 39** (incorporating the rejection in claim 37) (Original), please refer to claim **16** as set forth accordingly.
- 20. **As to claim 40** (incorporating the rejection in claim 37) (Currently Amended), please refer to claim 17 as set forth accordingly.

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21. **As to claim 41** (incorporating the rejection in claim 37) (Original), please refer to claim **18** as set forth accordingly.

- 22. **As to claim 42** (incorporating the rejection in claim 37) (Original), please refer to claim **19** as set forth accordingly.
- 23. **As to claim 43** (incorporating the rejection in claim 37) (Original), please refer to claim **20** as set forth accordingly.
- 24. **As to claim 44** (incorporating the rejection in claim 30) (Previously Presented), please refer to claim **21** as set forth accordingly.
- 25. **As to claim 45** (incorporating the rejection in claim 44) (Currently Amended), please refer to claim **22** as set forth accordingly.
- 26. **As to claim 46** (incorporating the rejection in claim 45) (Currently Amended), please refer to claim **23** as set forth accordingly.
- 27. **As to claim 47** (incorporating the rejection in claim 44) (Original), please refer to claim **24** as set forth accordingly.

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28. As to claim 48 (incorporating the rejection in claim 44) (Original), please refer to claim 25 as set forth accordingly.

- 29. **As to claim 49** (incorporating the rejection in claim 44) (Original), please refer to claim **26** as set forth accordingly.
- 30. **As to claim 50** (incorporating the rejection in claim 44) (Original), please refer to claim **27** as set forth accordingly.
- 31. **As to claim 51** (incorporating the rejection in claim 30) (Original), please refer to claim **28** as set forth accordingly.
- 32. **As to claim 52** (incorporating the rejection in claim 30) (Original), please refer to claim **29** as set forth accordingly.
- 33. **As to claim 53** (Currently Amended), Bowman-Amuah discloses A method of varying a value of a property associated with a task, during consecutive executions of the task, comprising:
 - creating settings associated with the property that control how the value may vary during consecutive executions of the task (i.e. Col. 154, Lines 58-60; Col. 253, Lines 63-67; Col. 258, Lines 31-37; Col. 279, Line 65 through Col. 280, Line 2; Col. 299, Lines 32-35);

allowing a user executing the task to customize the settings according to user preference; and verifying the task based on the settings (Col. 252, Lines 49-51 – the predetermined criteria may include user preferences ...)

Bowman-Amuah does not explicitly disclose allowing the value of the property to vary during consecutive executions of the task.

However, in an analogous art of *UniqueID Generator: A Pattern for Primary Key* Generation, Westra discloses allowing the value of the property to vary during consecutive executions of the task (e.g., P. 2, Sec. of 'System.CurrentTimeMillis()', 1st Par. – An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. - This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an n-tiered solution; bullet 5 - to change the incrementBy value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 - Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniquelD generator overcomes many scalability and flexibility issues where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Westra into the Bowman-Amuah's system to further provide allowing the value of the property to vary during consecutive executions of the task in Bowman-Amuah's system.

The motivation is that it would further enhance the Bowman-Amuah's system by taking, advancing and/or incorporating Westra's system which offers significant advantages that the data records or objects for each transaction require unique identifiers to allow them to be stored and retrieved accurately; thus there's a need to generate unique identifiers for the data involved in an EJB transaction process system as once suggested by Westra (e.g., P. 2, Lines 3-6).

- 34. **As to claim 54** (incorporating the rejection in claim 53) (Original), Bowman-Amuah discloses the method wherein the step of allowing the value of the property to vary during consecutive executions of the task further comprises:
- implementing a function that increments a property value according to the settings
 associated with the property that control how the value may vary during consecutive
 executions of the task (i.e. Col. 272, Line 66 through Col. 273, Line 6 persistence
 is the capability to permanently store this data in its original or a modified state, until
 the information system purposely deletes).
- 35. **As to claim 55** (Currently Amended), Bowman-Amuah discloses a computerreadable medium containing computer- executable instructions for a method of varying

a value of a property associated with a task, during consecutive executions of the task, the method comprising:

- allowing a user executing the task to customize the settings according to user
 preference; and
- verifying the task based on the settings (e.g., Col. 252, Lines 49-51 the
 predetermined criteria may include user preferences ...).

Bowman-Amuah does not explicitly disclose creating settings associated with the property that control how the value may vary during consecutive executions of the task; allowing the value of the property to vary during consecutive executions of the task.

However, in an analogous art of *UniqueID Generator: A Pattern for Primary Key Generation*, Westra discloses creating settings associated with the property that control how the value may vary during consecutive executions of the task; allowing the value of the property to vary during consecutive executions of the task (e.g., P. 2, Sec. of 'System.CurrentTimeMillis()', 1st Par. – An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. – This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an n-tiered solution; bullet 5 – to change the *incrementBy* value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value

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without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniqueID generator overcomes many scalability and flexibility issues where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Westra into the Bowman-Amuah's system to further provide creating settings associated with the property that control how the value may vary during consecutive executions of the task; allowing the value of the property to vary during consecutive executions of the task in Bowman-Amuah's system.

The motivation is that it would further enhance the Bowman-Amuah's system by taking, advancing and/or incorporating Westra's system which offers significant advantages that the data records or objects for each transaction require unique identifiers to allow them to be stored and retrieved accurately; thus there's a need to generate unique identifiers for the data involved in an EJB transaction process system as once suggested by Westra (e.g., P. 2, Lines 3-6).

- 36. **As to claim 56** (incorporating the rejection in claim 55) (Original), Westra discloses the computer-readable medium wherein the step of allowing the value of the property to vary during consecutive executions of the task further comprises:
 - implementing a function that increments a property value according to the settings associated with the property that control how the value may vary during

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consecutive executions of the task (e.g., P. 2, Sec. of

'System.CurrentTimeMillis()', 1st Par. - An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. -This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an n-tiered solution; bullet 5 – to change the *incrementBy* value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniqueID generator overcomes many scalability and flexibility issues where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

37. Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowman-Amuah in view of Westra and further in view of Lawrence Martine Moore (Pub. No. US 2002/0078069 A1) (hereinafter 'Moore')

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38. **As to claim 7** (Currently Amended), Bowman-Amuah discloses a method of creating a generator, wherein the generator performs a specific task, comprising:

- creating a new generator class that inherits a base generator class (i.e. Col. 11, Lines 36-58; Col. 12, Lines 3-8, 47-49; Col. 13, Lines 5-9 sub-classing and inheritance make it possible to extend and modify objects through deriving new kinds of objects from the standard classes available in the system; Col. 14, Lines 45-52);
- creating a public default constructor for the new generator class that overrides
 the base generator class constructor (i.e. Col. 11, Lines 55-58; Col. 14, Line 63
 through Col. 15, Line 3 to take full advantage a framework's reusable design, a
 programmer typically writes code that overrides and is called by the framework);
- implementing a function in the new generator class to perform the specific task;
 and verifying the task based on properties of the generator (i.e. Col. 14, Lines 24-26 they build from there by replacing some of the generic capabilities of the framework with the specific capabilities of the intended application).

Bowman-Amuah does not explicitly disclose that a class contains incrementation capability.

However, in an analogous art of *UniqueID Generator: A Pattern for Primary Key Generation*, Westra discloses that a class contains incrementation capability (e.g., P. 2, Sec. of 'System.CurrentTimeMillis()', 1st Par. – An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. – This approach uses an

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entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an n-tiered solution; bullet 5 – to change the *incrementBy* value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniqueID generator overcomes many scalability and flexibility issues where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Westra into the Bowman-Amuah's system to further provide that a class contains incrementation capability in Bowman-Amuah's system.

The motivation is that it would further enhance the Bowman-Amuah's system by taking, advancing and/or incorporating Westra's system which offers significant advantages that the data records or objects for each transaction require unique identifiers to allow them to be stored and retrieved accurately; thus there's a need to generate unique identifiers for the data involved in an EJB transaction process system as once suggested by Westra (e.g., P. 2, Lines 3-6).

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Bowman-Amuah and Westra do not explicitly disclose the generator perform a specific task including at least creating a file.

However, in an analogous art of *Automatic File Name/Attribute Generator for Object Oriented Desktop Shells*, Moore discloses the generator perform a specific task including at least creating a file (i.e. [0008] – to provide a mechanism for <u>automatically</u> generating file names To include some defining characteristic ...).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Moore into the Bowman-Amuah-Westra's system to further provide the generator perform a specific task including at least creating a file in Bowman-Amuah-Westra's system.

The motivation is that it would further enhance the Bowman-Amuah's system by taking, advancing and/or incorporating Moore's system which offers significant advantages to provide a mechanism for automatically generating files names and otherwise manipulating file attributes for documents produced from predefined templates, forms or stylesheet as once suggested by Moore (e.g., [0008]).

- 39. **As to claim 8** (incorporating the rejection in claim 7) (Original), Bowman-Amuah discloses the method wherein creating a public default constructor comprises:
 - initializing the base generator class constructor with the name and the description of the generator (e.g., Col. 204, Lines 22-52); and
 - defining the properties of the generator (i.e. Fig. 58, steps 5802 storing a
 plurality of attribute values ..., 5804 providing a plurality of attribute names in

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the attribute dictionary for the stored attribute values, 5806 – verifying that a current user is authorized to either set or get one of the attribute values upon a request which includes the attribute name that corresponds to the attribute value, 5808 – obtaining or updating the attribute value in the attribute dictionary if the verification is successful).

- 40. **As to claim 9** (incorporating the rejection in claim 8) (Original), Bowman-Amuah discloses the method wherein defining properties for the generator comprises:
 - (a) defining the name of a property (e.g., Fig. 58, step 5804 providing a plurality of attribute names …);
 - (b) setting a default value for the property (e.g., Col. 259, Lines 41-45; Col. 290, Lines 18-22);
 - (c) providing a description for the property (e.g., Fig. 105, step 10506 including
 a series of the attribute descriptors defining elements of the data);
 - (f) creating a custom property validator, if applicable (e.g., Fig. 129; Col. 250,
 Lines 9-22 the framework would provide a common approach to validating user data across all of an application's user interfaces; while some common validation rules would be provided ...; Fig. 127, elements 12702 validate(), 12706 validate(); Fig. 131 Validation Rule; Fig. 132; Col. 170, Lines 60-64); and
- (g) repeating (a)-(f) for all properties of the generator (i.e. Col. 285, Lines 61-67).

 Westra discloses (d) specifying incrementation settings for the property; (e) creating a custom property incrementor, if applicable (e.g., P. 2, Sec. of

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'System.CurrentTimeMillis()', 1st Par. – An easy way to generate unique IDs is to utilize the System.currentTimeMillis() method to get the current time in milliseconds and use it as your ID; Sec. of 'EntityBean Key Generator', 1st Par. – This approach uses an entity bean to select the next value from relational database table, which holds the latest value for unique ID generation; P. 3, Sec. of 'Applicability Use UniqueID Generator, bullets 1 through 3; P. 4, Sec. of 'Consequences', bullet 2 – The UniqueID generator pattern guarantees unique identifiers for your object/data across an n-tiered solution; bullet 5 – to change the *incrementBy* value, simply redeploy the EJB with a hot-deploy mechanism to avoid downtime and the increment will be changed to the new value without repercussions on the rest of the application; P. 5, Sec. of 'Implementation', bullet 1 – Determining incrementBy for your application; P. 6, Sec. of 'Summary', Lines 2-5 – While there are variations of the pattern, the UniqueID generator overcomes many scalability and flexibility issues where other patterns fall short, such as local ID caching, limiting remote method invocations, and portability).

41. **As to claim 10** (incorporating the rejection in claim 17) (Original), Bowman-Amuah discloses the method further comprising implementing a function to be executed before each execution of a generator (e.g., Fig. 136, step 13602 – a first assertion asserting a pre-condition ...; Col. 255, Lines 31-41 – having pre-conditions and post-conditions that must be satisfied for the operation to be successful).

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42. **As to claim 11** (incorporating the rejection in claim 7) (Original), Bowman-Amuah discloses the method further comprising implementing a function to be executed after each execution of a generator (Fig. 136, step 13606 – a second assertion asserting a post-condition ...; Col. 255, Lines 31-41 – having pre-conditions and post-conditions that must be satisfied for the operation to be successful).

Claim Rejections - 35 USC § 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 43. Claims 12-14, 16-17, 20, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore
- 44. **As to claim 12** (Currently Amended), Moore discloses a method of using a generator that performs a specific task such as including at least creating a file (i.e. [0008] to provide a mechanism for automatically generating file names To include some defining characteristic ...), comprising:
 - customizing settings of the generator (i.e. [0008]), the settings including
 incrementation settings that specify how the value of a generator property may
 vary between generated objects (i.e. [0012], Lines 4-16 the argument may

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require calculation of a time and/or date or of an incremental number, or require that the user be prompted for input; [0023] – the generated text may be, for example, the current date, the current time, a user input, and/or an incremental numerical value; [0031]; P. 4, Left-Col, Line 35 – calculating an incremental value);

- executing the generator with the customized settings; and verifying the task
 based on the settings of the generator (i.e. [0012], Lines 10-16 the new
 document may be saved by concatenating text string(s) for the fixed portion(s)
 and the calculated or received text string(s) for the variable portions).
- 45. **As to claim 13** (incorporating the rejection in claim 12) (Currently Amended), Moore discloses the method customizing the settings of the generator, is accomplished through a user interface (e.g., Fig. 2; [0016]; [0022]; [0024]; [0026]; [0039]).
- 46. **As to claim 14** (incorporating the rejection in claim 13) (Currently Amended), Moore discloses the method further comprising:
 - starting an object generator user interface;
 - selecting the generator; and
 - customizing properties of the generator (e.g., Fig. 2; [0016]; [0022]; [0024];
 [0026]; [0039]).

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47. **As to claim 16** (incorporating the rejection in claim 14) (Original), Moore discloses the method further comprising loading the settings of a generator from a file (e.g., Fig. 4B; [0046], Lines 10-13).

- 48. **As to claim 17** (incorporating the rejection in claim 14) (Currently Amended), Moore discloses the method wherein customizing the properties of the generator comprises:
 - (a) selecting one property (e.g., Fig. 2);
 - (b) specifying a value of the one property;
 - (c) specifying incrementation settings of the one property (i.e. [0012], Lines 4-16

 the argument may require calculation of a time and/or date or of an incremental number, or require that the user be prompted for input; [0023] the generated text may be, for example, the current date, the current time, a user input, and/or an incremental numerical value; [0031]; P. 4, Left-Col, Line 35 calculating an incremental value); and
 - (d) repeating (a)-(c) until there are no more properties to be customized.
- 49. **As to claim 20** (incorporating the rejection in claim 14) (Original), Moore discloses the method further comprising saving the settings of the generator (Fig. 4B; [0046], Lines 10-13).

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- 50. **As to claim 28** (incorporating the rejection in claim 12) (Original), Moore discloses the method further comprising executing the generator through a user interface (e.g., Fig. 2; [0022]).
- 51. Claims 15, 18-19, 21-27, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Bowman-Amuah
- 52. **As to claim 15** (incorporating the rejection in claim 14) (Currently Amended), Moore does not explicitly disclose the method selecting a generator further comprising adding the generator from files containing one or more generators.

However, in an analogous art of system of *method and article of manufacture for* a persistent state and persistent object separator in an information services patterns environment, Bowman-Amuah discloses the method selecting a generator further comprising adding the generator from files containing one or more generators (i.e. Col. 71, Lines 18-20; Col. 99, Lines 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Bowman-Amuah into the Moore's system to provide the method selecting the generator further comprising adding a generator from files containing one or more generators in Moore system.

The motivation is that it would further enhance the Moore's system by taking, advancing and/or incorporating Bowman-Amuah's system which offers significant advantages that persistence is the capability to permanently store this data in its original

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or a modified state and hence provides incrementation capability for a generator properties as once suggested by Bowman-Amuah (i.e. Col. 272, Line 66 through Col. 273, Line 6).

53. **As to claim 18** (incorporating the rejection in claim 14) (Original), Moore does not explicitly disclose the method further comprising setting a schedule for executing the generator.

However, in an analogous art of system of *method and article of manufacture for* a persistent state and persistent object separator in an information services patterns environment, Bowman-Amuah discloses the method further comprising setting a schedule for executing the generator (i.e. Col. 74, Lines 21-23; Col. 100, Lines 20-24 – they provide services for scheduling, starting, stopping, and restarting both client and server tasks; Col. 108, Lines 30-34 – areas for design attention include scheduling...; Col. 109, Lines 40-44; Col. 118, Lines 47-49; Col. 188, Lines 43-46; Col. 194, Lines 1-2, 14-17).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Bowman-Amuah into the Moore's system to provide the method further comprising setting a schedule for executing the generator in Moore system.

The motivation is that it would further enhance the Moore's system by taking, advancing and/or incorporating Bowman-Amuah's system which offers significant advantages that persistence is the capability to permanently store this data in its original

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or a modified state and hence provides incrementation capability for a generator properties as once suggested by Bowman-Amuah (i.e. Col. 272, Line 66 through Col. 273, Line 6).

54. **As to claim 19** (incorporating the rejection in claim 14) (Original), Moore does not explicitly disclose the method further comprising setting logging options for executing the generator.

However, in an analogous art of system of *method and article of manufacture for* a persistent state and persistent object separator in an information services patterns environment, Bowman-Amuah discloses the method further comprising setting logging options for executing the generator (i.e. Fig. 12, environment --> application services --> logging; Col. 68., Lines 17-22; Col. 81, Lines 65-67; Col. 97, Lines 4-5; Col. 100, Lines 38-43; Col. 101, Lines 10-14 – logging services support the logging of informational, error, and warning messages; Col. 194, Lines 14-17, 56-60).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Bowman-Amuah into the Moore's system to provide the method further comprising setting logging options for executing the generator in Moore system.

The motivation is that it would further enhance the Moore's system by taking, advancing and/or incorporating Bowman-Amuah's system which offers significant advantages that persistence is the capability to permanently store this data in its original or a modified state and hence provides incrementation capability for a generator

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properties as once suggested by Bowman-Amuah (i.e. Col. 272, Line 66 through Col. 273, Line 6).

As to claim 21 (incorporating the rejection in claim 12) (Currently Amended),

Moore discloses the method customizing the settings of a generator, is accomplished programmatically.

However, in an analogous art of system of *method and article of manufacture for* a persistent state and persistent object separator in an information services patterns environment, Bowman-Amuah discloses the method customizing the settings of a generator, is accomplished programmatically (i.e. Col. 35, Lines 17-29; Col. 71, Lines 13-20; Col. 95, Lines 12-15).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Bowman-Amuah into the Moore's system to provide the method customizing the settings of a generator, is accomplished programmatically in Moore system.

The motivation is that it would further enhance the Moore's system by taking, advancing and/or incorporating Bowman-Amuah's system which offers significant advantages that persistence is the capability to permanently store this data in its original or a modified state and hence provides incrementation capability for a generator properties as once suggested by Bowman-Amuah (i.e. Col. 272, Line 66 through Col. 273, Line 6).

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56. **As to claim 22** (incorporating the rejection in claim 21) (Currently Amended), Bowman-Amuah discloses the method further comprising:

- creating a new instance of the generator;
- setting a number of objects to be generated by the generator (i.e. Col. 192, Lines 39-43; Col. 211, Lines 25-28; Col. 240, Lines 8-11; Col. 241, Lines 33-36); and
- customizing properties of the generator (i.e. Col. 186, Lines 8-20).
- 57. **As to claim 23** (incorporating the rejection in claim 22) (Currently Amended), Moore discloses wherein customizing properties of the generator comprises:
- (a) setting values of the properties; and
- (b) specifying incrementation settings of the properties (e.g., [0012], Lines 8-10 the
 argument may require calculation of a time and /or date or of an incremental
 number, or require that the user be prompted for input).
- 58. **As to claim 24** (incorporating the rejection in claim 21) (Original), Moore discloses the method further comprising:
 - creating a new instance of the generator (i.e. Col. 192, Lines 39-43; Col. 211,
 Lines 25-28; Col. 240, Lines 8-11; Col. 241, Lines 33-36); and
 - loading saved settings of the generator from a file (e.g., Fig. 4B; [0046], Lines 10 13).
- 59. **As to claim 25** (incorporating the rejection in claim 21) (Original), Moore discloses The method further comprising:

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creating a new instance of the generator (i.e. Col. 192, Lines 39-43; Col. 211,
 Lines 25-28; Col. 240, Lines 8-11; Col. 241, Lines 33-36);

loading saved settings of the generator from a file (e.g., Fig. 4B; [0046], Lines 10 13); and

Bowman-Amuah discloses implementing a function to execute the generator asynchronously (i.e. Col. 51, Lines 37-44; Col. 67, Lines 13-20; Col. 70, Lines 49-54).

- 60. **As to claim 26** (incorporating the rejection in claim 21) (Original), Bowman-Amuah discloses further comprising:
 - creating a new instance of the generator (i.e. Col. 192, Lines 39-43; Col. 211,
 Lines 25-28; Col. 240, Lines 8-11; Col. 241, Lines 33-36);
 - displaying an object generation status UI; and
 - displaying an object generation status UI (i.e. Fig. 129 status; Col. 92, Lines 53-55; Col. 108, Lines 16-19; Col. 111, Line 37; Col. 112, Lines 2, 9-10, 41-43);
 and
 - adding the generator to the object generation status UI (i.e. Fig. 129 status;
 Col. 92, Lines 53-55; Col. 108, Lines 16-19; Col. 111, Line 37; Col. 112, Lines 2, 9-10, 41-43).

Moore discloses loading saved settings of the generator from a file (e.g., Fig. 4B; [0046], Lines 10-13).

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- 61. **As to claim 27** (incorporating the rejection in claim 21) (Original), Moore discloses loading saved settings of the generator from a file (Fig. 4B; [0046], Lines 10-13). Bowman-Amuah discloses the method further comprising:
- creating a new instance of the generator (i.e. Col. 192, Lines 39-43; Col. 211, Lines 25-28; Col. 240, Lines 8-11; Col. 241, Lines 33-36);
- displaying a schedule dialog box that allows a user to specify a schedule for executing the generator (i.e. Col. 74, Lines 21-23; Col. 100, Lines 20-24 they provide services for scheduling, starting, stopping, and restarting both client and server tasks; Col. 108, Lines 30-34 areas for design attention include scheduling...; Col. 109, Lines 40-44; Col. 118, Lines 47-49; Col. 188, Lines 43-46; Col. 194, Lines 1-2, 14-17); and
- displaying a logging dialog box that allows a user to specify logging options for executing the generator (i.e. Fig. 12, environment --> application services --> logging; Col. 68., Lines 17-22; Col. 81, Lines 65-67; Col. 97, Lines 4-5; Col. 100, Lines 38-43; Col. 101, Lines 10-14 logging services support the logging of informational, error, and warning messages; Col. 194, Lines 14-17, 56-60).
- 62. **As to claim 29** (incorporating the rejection in claim 12) (Original), Moore discloses executing the generator through a user interface, but does not explicitly disclose the method further comprising executing the generator programmatically.

However, in an analogous art of system of method and article of manufacture for a persistent state and persistent object separator in an information services patterns

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environment, Bowman-Amuah discloses the method further comprising executing the generator programmatically (i.e. Col. 35, Lines 17-29; Col. 71, Lines 13-20; Col. 95, Lines 12-15).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Bowman-Amuah into the Moore's system to further provide the method further comprising executing the generator programmatically in Moore system.

The motivation is that it would further enhance the Moore's system by taking, advancing and/or incorporating Bowman-Amuah's system which offers significant advantages that persistence is the capability to permanently store this data in its original or a modified state and hence provides incrementation capability for a generator properties as once suggested by Bowman-Amuah (i.e. Col. 272, Line 66 through Col. 273, Line 6).

Conclusion

63. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben C. Wang whose telephone number is 571-270-1240. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BCW ¥₩

October 23, 2007

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